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Number Nine

SEPTEMBER, 1915

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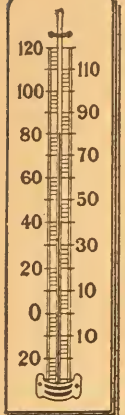

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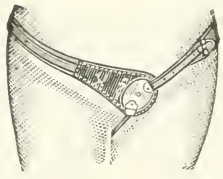

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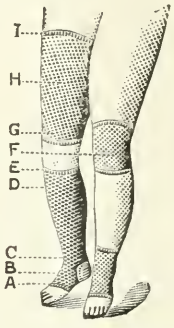

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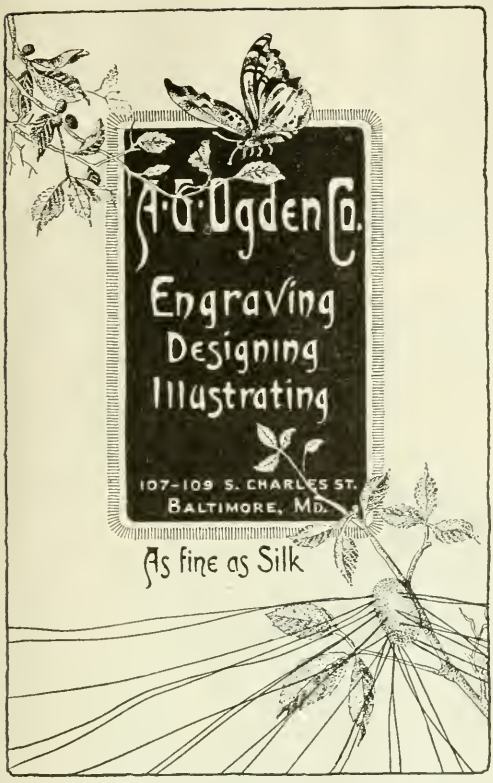

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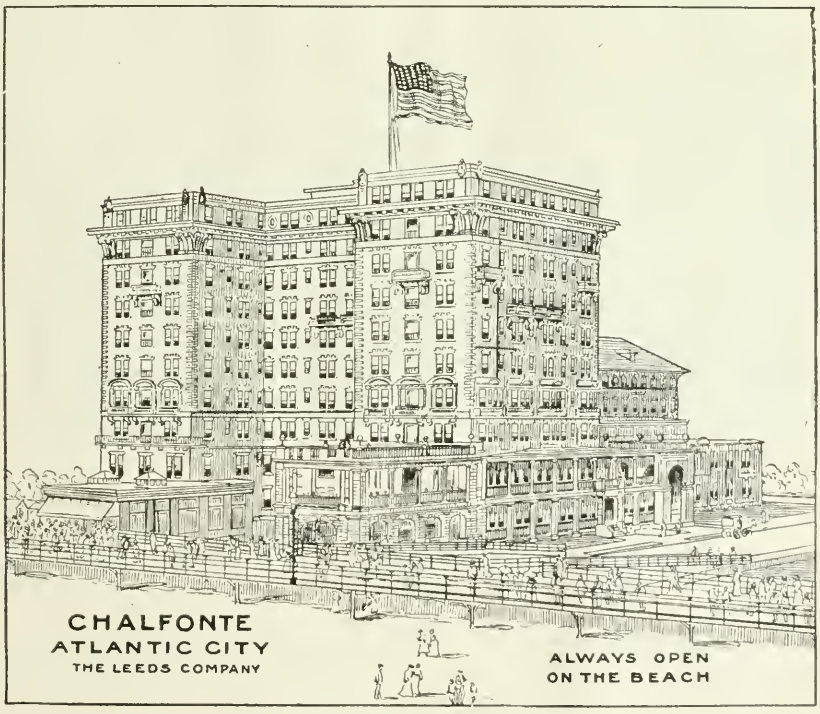

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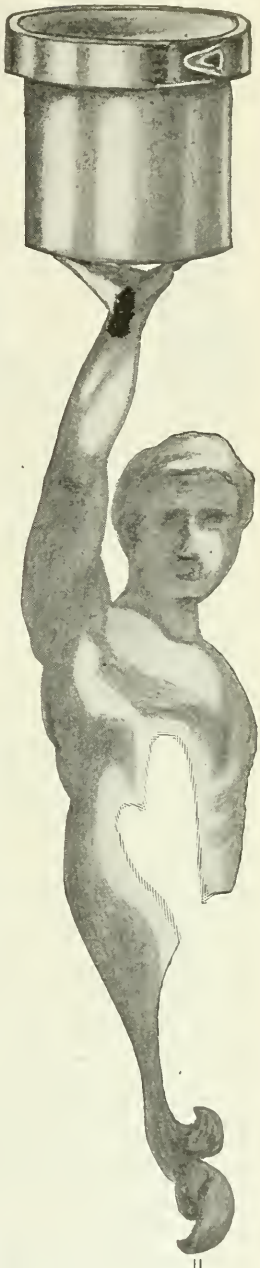

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BY

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"SELF MANUFACTURE."*

By Clement A. Penrose, M.D.

Ladies and Gentlemen:

My difficulty in addressing such a promising-looking graduating class is not due to any lack of material. The occasion is too transient, however, for me, having the welfare of each member of this class so much at heart, to give them all the advice and all the warnings I should like to give them or to present to you, the audience, a picture of the successful careers which I feel sure will crown their future efforts. The heroic death of a Red Cross physician, Dr. Ernest P. Magruder, from typhus in Serbia is so recent in my mind (we were boys together at the university) that I feel especially sensitive to the obligation imposed upon me of giving these young women a message which is adequate for the beginning of their life's work. I realize too keenly the many pitfalls they must pass by, the many trials and tribulations they must endure, the many mysteries and dangers they will have to cope with, perhaps as Red Cross workers in fearful wars, or in no less praiseworthy efforts amidst the sufferers of our large cities.

I am not concerned about the training these nurses have received. The success of our graduates in passing the State Board of Examiners in the past, as well as their meeting efficiently all other tests, has well demonstrated the quality of their instruction. The knowledge I have of this institution, its superintendent, Miss Nash, and her excellent staff, makes me feel certain that they are fully equipped for their respective duties. What I would gladly give them, if it were possible, is the knowledge which is derived from experience alone, and which is not taught in any book.

Patrick Henry, in a speech in the Virginia Convention, March 17, 1775, said: "I have but one lamp by which my feet are guided, that is the lamp of experience. I know no way of judging of the future but by the past." The experience of others, while it may

*Address given at the graduating exercises of the Nurses' Training School of the Church Home and Infirmary, May 12, 1915.

help us in many ways, will not, unfortunately, make our own characters. This is ever the result of individual effort, whether we succeed or fail. Believing that one truth well learned is worth many but partly heeded, I shall not endeavor, as is customary on these occasions, to cover a wide range of topics, but will confine myself, hard as it is to do so, to a single life problem, trusting that its exposition may be of some service to these young women in their future work.

The title of my address is "Self-Manufacture," or "the making of one's self," and under this heading I will briefly emphasize the importance of developing especially the following qualities—the youthful spirit, toleration, power of observation, interest in the work, forgetfulness of self, and moral responsibility.

These nurses are now leaving the protective influence of their "Alma Mater," and will have to face life, with its many problems, more or less alone. Youth is the time of the greatest contradictions. If we study the biographies of great men and women we will find in this time of their life the records of the fiercest radicalism or the greatest conservatism; the most bitter melancholy or the most irrepressible gayety; the strictest observance of social propriety or the wildest disregard for all laws of society. The store of life and animal spirits, which has accumulated through the protected and placid years of early childhood, suddenly breaks all its barriers like an irresistible torrent and rushes forth furious and uncontrolled until it subsides into the quieter tributaries of approaching middle age. Apply for a moment this consideration of youth to your own chosen profession. The training here, under the sheltering influence of the Dear Old Church Home, we will designate as the childhood of your profession, where a great potential flood of energy and knowledge has been accumulated under the most kind and competent instruction. Now suddenly, by this graduation ceremony this evening, the barriers have been taken away and you are thrown on your own resources. The proposition which you now must face is, what are you going to do with your own future? How can you best utilize the knowledge obtained here for your own betterment and the betterment of the world in which you live? You are in the crucial period of life, where the tendency is to be too extreme and where it is so easy to be marred in the making, or to fail simply from a poor method in building.

The transition from this passive life into an active one, as in the case of childhood into youth, is most abrupt. Youth has suddenly become conscious of its full life and must develop the ideals so necessary for its ultimate happiness. It is a great mistake at this stage to plan your lives too far ahead. One who is really young cannot consciously do so. It is better for your character development to bear the full fury of the storm, keeping strongly and sincerely to one purpose, rather than pick your way too cautiously. The struggle for existence is what in reality keeps us young. The

easy liver, the human drone, is the one who prematurely ages. Remember that it is the quality of experience rather than the quantity which counts in this world. Young people who daily face new situations and new aspects of life have more valuable experience than those who are more mature. It is by the interpretation of these first experiences that a true knowledge of the world is given to us. Older persons only live in their past in endless repetition of events which have already happened. I therefore urge you not to face life with a set plan or philosophy (youth never gets ideas, but ideas get it). Remain true to your first ideals, which are the most vital, and which will survive above everything the harshness of the world.

Youth is the period of reasoning and logical activity. The time to use your facilities to your best advantage is now, while you are young; later you will to your detriment rely more on tradition. We often wonder why life is so short and so incomplete, and why we are so ruthlessly cut down in our declining years. As a good Scotchman tersely put it, "Why are we begun for when we're so soon done for?" This is probably but a protective policy of nature. The ideas of the young are living and potential, while those of the aged are often dying or already dead. Each generation brings into being its new leaders and reformers, better able to compete with the new conditions of civilization, and kills off the skeptics and misanthropists, who are poisoning the world and who speak of all new improvements as youthful effusions. The daring of youth is necessary to cure the inertia, and lethargy and cowardice everywhere present. I would, therefore, emphasize that you keep your youthful spirits as long as you live. Open your minds to all new ideas and keep up forever a strong, aggressive policy of daring and doing with an optimism regarding the future, which is the very essence of perpetual youth.

The second quality, toleration, I feel needs scarcely to be emphasized to these graduates, because of the training they have already received.

The Church Home, owing to its several unique features, probably gives its student nurses more practical experience than the majority of hospitals. Having such a large staff of efficient physicians, derived from many different medical schools, under whom they have performed their nursing, they are not apt to become intolerant, the worst fault of a trained nurse, or anyone, in fact. Early in their training they have realized that good thoughts are born just as well in the University of Maryland as in the Johns Hopkins, or in the Yale Medical School as in the Harvard, etc. They probably know that, after all, it's the man in the physician which makes a good physician, and the woman in the nurse which makes a good nurse, and that the treatment of the sick and suffering does not simply mean operations and medicines, but entails many kindnesses, much sympathy and great encouragement, and that their patients have minds and spirits to be treated as well as

bodies. I believe their training here will prevent them, when in private work, from criticising their patients, patients' family or the physician in charge.

Oliver Wendell Holmes, in speaking (Critic and Guide) of the large field which medicine covers, and which has made us think of this science as allopathy or treating everything diseased, cautions us to be tolerant of every bit of information which may come to us. He shows us historically that we have obtained many of our most important remedial agents, both surgical and medical, from very crude and ignorant sources. A poor Friar taught us how to operate for stone in the bladder, the Japanese acupuncture, a postmaster how to sound the Eustachian tube, while the American savage taught us the uses of lobelia. A monk told us how to use antimony, a soldier gave us a treatment for gout, a sailor a method for preventing scurvy, while a market woman taught us the cause of the itch, and last, but not least, a dairy maid showed Jenner how to prevent smallpox.

With such illustrations as these in mind, we should certainly not condemn any method which might be presented to us until it has received a thorough trial.

Cultivate your powers of observation. The most illiterate persons are not necessarily the most ignorant, if their fight with the hard conditions about them have taught them how to observe facts. Half-trained minds, which are developed only along special lines, are the great menace to modern civilization. With their minds in a state of mental confusion from the wealth of material daily presented, they show little discrimination in the selection of what is best. They seek various "isms" and "cults" as panaceas for everything, and are the hardest patients for nurses and doctors to get along with.

Shakespeare was right when he said (King John, Act 1, Scene 1):

> "For he is but a bastard to the time,
> That doth not smack of observation."

The power of observation is especially important in a trained nurse. The physician may see a patient at a time when all his symptoms seem favorable. He examines, however, carefully the well-recorded observations made by the nurse on her clinical chart. A brief remark there attracts his attention. He follows up this clue more closely and an unexpected danger is brought to light, which he averts by prompt action.

In a hundred important ways this quality is of advantage to those handling the sick and suffering. It is probably of the greatest help in the case of little children, who cannot well describe their symptoms, and where the most insignificant occurrence may teach us about their condition. The whole science of medicine rests on the power of observation. The modern conception that many diseases are due to micro-organism we owe to this quality being born

in men like Pollender, who in 1849 first discovered the anthrax bacillus in cases of anthrax, or Davaine a few years later.

Pasteur and Koch subsequently developed the great science of bacteriology by the same means. This might be said about all great discoveries along any lines.

While observing carefully and accurately the various phenomena going on around you, make also a mental note of your own deficiencies. Study how best to overcome all obstacles to the proper handling of the cases entrusted to your care. Without being overly conscientious or going needlessly into detail, omit nothing which will contribute to the welfare of your patients or promote your harmonious relations with them. Make them feel that if they are ever sick again you are the nurse they would like to have a second time.

Be interested in nursing. Without this interest (in *your work* essentially a human interest) you will be a failure as a trained nurse, and had much better take up some other line of employment. Patients soon discover this quality and resent its absence. The most charming manner or attractive personality will not compensate for its loss. Sick people want help, and while I do not think they object, as a rule, to your good looks and other charms (occasionally some wives do), little reliance can be placed on such attractions winning the day without that all-important interest, which is the very kernel of your success.

It is almost impossible not to be interested in medical work, which touches upon every phase of life and in reality decides the very destiny of nations. The wonderful genius of that great General, Hannibal, aided by his terrible Numidian Cavalry, could not conquer Rome. The African fever, however, which was brought by his army across the Pyrenees, insidiously in the succeeding generations, sapped the stamina and manhood of the Roman legions as no war had ever done and made them an easy prey to their future enemies.

Malaria and yellow fever, in reality, prevented the building of the Panama Canal under the French Count De Lesseps. General Gorgas and his able assistants, by his conquest of these diseases, has made it possible to complete this great engineering work.

In 1494 the armies under Charles VIII of France attempted the conquest of Italy. These troops, derived from all parts of Europe, returning to their homes scattered another terrible scourge over the civilized world. (A new world disease introduced into the old by the returning sailors of Christopher Columbus), and which even to the present day left its mark on every generation. Leprosy, derived from the East, was scattered by Crusaders all over the world, and still remains uncured.

Typhoid fever is costing this coutnry every year over a hundred million dollars, and tuberculosis even more. What typhus fever will cost Europe is beyond the imagination to depict, unless Dr. Harry Plotz's recent work helps to avert its ravages.

Last, but not least, one-fifth of the children of civilized nations die before reaching five years of age. Diseases are, even more than wars, the greatest obstacle to human progress, slaying, crippling and impoverishing millions every year. Can anyone who has entered such a field of endeavor lack interest? It hardly seems possible, when speaking broadly of the conditions to be met. It is only in individual cases, in the monotony of looking after one patient, that our interest may lag. Remember also that what may interest you, who are trained along these lines, may be very abhorrent and gruesome to others. Do not talk shop simply for the purpose of relieving your own fullness on these topics. If you are requested to give information along such lines, do it to some good purpose. If your patients endow a few more rooms here at the Church Home, or decide to leave us a good legacy for certain purposes in the future, you have indeed talked well. Our good treasurer, Mr. Thomsen, will, I am sure, bear me out in this statement.

Forget yourselves in your work. Unselfishness and self-denial are truly *most* essential in nursing, as they are in reality in most pursuits where we wish to accomplish something. We pay for every success in life by the expenditure of ourselves in some way or other. *Nothing* comes easily; if it does, then the success is not real or lasting. Unfortunately, although the spirit of sacrifice is within us, the opportunity is sometimes indefinite. We may confuse the making of our environment with the making of ourselves, two very different propositions. From a character standpoint, every man or woman is self-made. No one else can accomplish this for you. As an illustration:

A young man, recently graduated from a good college, went to his father, a successful manufacturer, and said: "I want to learn our business from the ground up; put me in on the lowest round of the ladder." Much pleased, the old man did so, and his son was placed in the machine shops on a small wage, a fact that the father was never tired of referring to with the greatest pride. Being a fine and intelligent fellow, popular with all his coworkers, and last, but not least, a son of the old man, he sailed through all the various departments with flying colors, serving but a few months in some which had taken older men a quarter of a century to learn. Promoted rapidly, he finally became a partner in the firm. A few years later his good old father died, and he succeeded him. The firm shortly after went into the hands of receivers, due to faulty management, was reorganized, and the boy was given a petty clerkship, which he has since filled adequately and which he was just about suited for, and nothing else. Had he fought as his father had fought, step by step, in the face of great commercial competition and opposition, and with the expenditure of much vitality and energy, he might have filled the old man's shoes, but under no other conditions.

It was not the young man's fault that he was a failure. His motives were of the highest. His intentions the very best, but cir-

cumstances were against him. He needed a handicap. The assistance given him was detrimental to his future. He was unable to make himself.

With examples like the above as warnings, I charge you not to rely on influence, or patronage, or a charming personality to pull you through. On the other hand, do not be discouraged because you might feel that you are not starting your life-work with every advantage. Perhaps some of you have greater responsibilities at home than the others, possibly you do not know how to make friends, etc. Never mind, you can overcome everything which is against your advancement, and can even go farther than the most fortunate in your class. This handicap will help you to build up your own character. You will get more that's worth while for your greater sacrifice.

I now come to the last requisite in the making of oneself, and which is a fitting climax to this paper—moral responsibility. Man becomes a man, in the true sense, when his voluntary acts become factors in the world; or, in other words, when he develops moral responsibility. A plant forms a poison within itself which kills those who eat it. A bacteria produces toxines which injure the host in which it develops. The wild beast slays its prey for food. There is, however, no moral code broken in either instance. In the man, however, is born the consciousness of right and wrong. A conscience is developed, and in his evolution upwards this is true in an ever-increasing degree. Man is the best proof we have that Nature strives to better the world, and when she has at last evolved this intelligent creature, she leaves the world very much in his own hands. He has been elevated to the dignity of a creator having dominion over everything. No matter what his station, he had the power for good or evil; the choice lies within himself. Men or women who are carrying on scientific work have especially the need of a high sense of responsibility. Every discovery, every known truth or fact, has the power to benefit the race if utilized correctly. Some which at first may seem to harm, ultimately will help humanity.

Benjamin Franklin, when asked what was the value of a scientific discovery, replied, "the same as a baby; it may develop into something."

The influence of a nurse or physician upon the usually very sensitive and easily molded patient is far-reaching. Thoughtless actions or statements may affect their future lives for all times. The health of their bodies or minds may be at stake. A physician who handles cases of moral disease, but does not attempt to help the patient further than with pills and potions, is a poor fellow at best, and certainly degenerating. The nurse who is absolutely passive in her duties and makes no effort to develop in her patients good resolutions, hope in the future and faith in themselves, is almost without moral responsibility. They are both fit companions for each other, but unworthy of the high calling into which they have un-

fortunately blundered. Woe betide the poor victim who falls into their clutches.

As I have proceeded with this paper the fear first entertained in preparing it, that some important warning or suggestion might be omitted, has entirely disappeared. Looking upon this class of 1915 I realize that perhaps much in it could have been left out as far as they are concerned. Surely the bright faces we see here before us reflect nothing but what is best in their profession. I confess I have little fears for them. They are joining an army of the most loyal and devoted women in the world. Loyal to the great cause of relieving the sick and the suffering. Devoted, even unto death, to the high standards and ethics of their noble profession. In the mind of every man, the very word "nurse" carries with it memories of his early childhood, of his home, of his mother, of his wife or sisters. When we are sick and suffering we are as children, whether on the battlefield or in construction camps, or in the private or free wards in the many hospitals throughout the world. We want our home. These girls, "God bless them all," bring it back to us as nothing else could.

"OUR GENERAL DIES."

The growing pallor of his face
Well matched the spotless pillow-case,
With frowning brow at last grown mild
He lay as helpless as a child.
That voice, anon, a bugle call,
Was lost to us across the hall;
Quick ears are deaf to stifled sighs
And anguished words, "Our General dies,"
Keen eyes grown dim, yet held in sight
The features of the nurse in white,
While stiffening fingers sought her hand,
His thoughts sped back to fatherland;
A smile upon cold lips implied
He dreamed of home—then died.

FATAL POST-OPERATIVE PULMONARY EMBOLISM.

Emil Novak, A.B., M.D., F. A. C. S.,
Baltimore, Md.

THE almost entire safety with which even the most extensive operative procedures can be carried out in our day tends, quite unconsciously, to make the surgeon forget that all the wonderful advances in the surgical art have not been able to eliminate the possibility of certain grave accidents. Even the conscientious surgeon is apt to get into the rut of advising and performing operations

without due consideration of these possibilities, until from time to time some tragedy brings him up with a jerk to a realization of the fact that surgery is indeed a very serious business. While such accidents may be reduced to a minimum by good judgment and good technique, it is nevertheless true, to paraphrase an old maxim, that accidents will happen even in the best-regulated surgical clinics. Fortunately, the majority of such accidents merely increase the patient's pain or discomfort, or lengthen the period of convalescence from the operation. On the other hand, every surgeon must sooner or later experience that unhappy state of mind which comes when death snatches away a patient upon whom some elective and perhaps very simple operation had been performed.

Of the grave post-operative complications, the most common are infection, hemorrhage and embolism. The first two of these are in large measure preventable by proper surgical technique. The prevention of embolism, however, is a much more difficult problem, inasmuch as we are still in large measure ignorant of the factors responsible for its occurrence.

While I have seen quite a number of cases of pulmonary embolism during my surgical experience, it is only recently that I encountered my first fatal case. It made a deep impression on me. The following is a brief history of the case:

Mrs. A. S., age 34, had suffered for four years with occasional but increasingly frequent attacks of typical gallstone colic. "Indigestion" was more or less constant, with belching and epigastric distress. The gall bladder region was sensitive to pressure. In addition, she had for many years had a right-sided inguinal hernia, which was gradually increasing in size. The general condition was good.

Operation.—Patient entered Mercy Hospital on June 19, 1913, and on the following day cholecystostomy and herniotomy were performed. The gall bladder was moderately distended, the walls being only slightly thickened. The omentum was adherent to its under surface. Fifty-three calculi were removed from the gall bladder and the cystic duct. Most of them were small, the largest being 1½ cm. in diameter. There were no stones in the common bile duct. Herniotomy by the Bassini method was done for the relief of the right-sided hernia. The operation was a comparatively simple one, requiring only about 50 minutes, the patient leaving the table in excellent condition.

Death from pulmonary embolism on sixteenth day. July 4, the sixteenth day after the operation, the patient was sitting up in a chair when I made my visit. The stitches had been removed from both wounds, union being perfect in each instance. She had been allowed to sit up on the fourteenth day, her convalescence having up to this time been uneventful. On this, the third day she had been sitting up, the patient was in excellent condition, laughing and chattering in a lively manner. The gall bladder was, of course, still being drained. The patient remarked that the dressings were

wet from bile, and I suggested that she lie down so that they might be changed. She stepped from the chair to the bed and stretched out. As she did so I heard a loud gasp, and on looking at her, saw that her face was fixed and staring. The pulse had stopped at once, and although she gasped feebly once or twice more, death had evidently taken place almost instantaneously. There was no response to the hypodermic injection of camphor and the various other measures which were resorted to.

Thrombosis, carrying with it the possibility of embolism, may develop after any type of operation. There seems to be a much smaller element of risk in the case of operations in the upper abdomen than of those involving the pelvic viscera. Prostatectomy and hysterectomy especially seem to be fraught with this form of risk. An idea of the frequency of thrombosis as a post-operative complication may be found from the statistics of Schenck (1), who finds that in 3204 operations for uterine myoma in 12 different clinics, thrombosis developed in 96, or 3 per cent.

McLean (2) found that of 1310 laparotomies, 1.9 per cent. were followed by thrombosis and embolism. There were in this series 8 cases of fatal pulmonary embolism, 3 of pulmonary embolism in which the patients recovered, 2 of pulmonary embolism followed by abscess formation with recovery, and 1 of embolism of the liver, followed by hepatic abscess and recovery.

Pulmonary embolism, when it occurs after operation, usually does so between the eighth and twentieth day of convalescence. Occasionally, however, the accident may occur during the first week, while, on the other hand, its occurrence is sometimes much later than the twentieth day. For example, McLean speaks of a case in which fatal embolism occurred two months after an operation for uterine myoma.

In the majority of cases, fortunately, the embolism is not associated with a fatal termination. It is certain that embolism is often not recognized, more especially when it involves a small vessel or when the embolus is lodged in an organ in which vascular anastomosis is free. I shall not, in this brief discussion, speak of the symptomatology in cases of non-fatal embolism. The rapidity with which death occurs in fatal pulmonary embolism is quite variable. In a critical analysis of 16 fatal cases Busch (3) found that death was instantaneous in one-fourth (4). In the others 10 minutes or more elapsed before death took place.

The great amount of study which has been given to the problem of the etiology of post-operative thrombosis and embolism has not as yet resulted in anything approaching unanimity in the views on this subject. It may be stated that the consensus of opinion is to the effect that the factor of greatest importance in the production of thrombosis and embolism is a low-grade infection, so slight as to give rise to no clinical manifestations except perhaps a trifling degree of fever.

Other factors on which more or less stress has been laid are trauma, slowing of the blood stream, and chemical alteratins in

the composition of the blood. McLean has recently reported experimental observations which seem to indicate that destruction of the endothelial cells is not *per se* a cause of thrombi, but that necrosis of tissue does play an important part. Ribbert (4), on the other hand, concludes from a study of the long, loose thrombi in fatal cases of pulmonary embolism that chemical changes in the composition of the blood are chiefly responsible, and that the important factor in their prevention consists in reducing the coagulating power of the blood.

In view of the uncertainty which exists as to the etiology of pulmonary embolism, it is not surprising that no ironclad rules can be laid down for the prevention of this grave complication. In many respects, indeed, the advice given by authors is very contradictory, especially with regard to the question of the influence of the length of time the patient is kept in bed after operation. Those who advocate early sitting up after operation urge that early moving about prevents the stagnation of the blood current, which by some is regarded as of importance in the production of thrombosis. On the other hand, certainly it cannot be denied that such early mobility must increase the possibility of bits of the thrombosis being swept away with the occurrence of embolism. Bearing this in mind, it would certainly seem that there is an element of danger in the present-day tendency to get patients out of bed at an inordinately early period after operation. This is especially true because thrombosis often occurs in the iliac veins, and hence may pass unnoticed.

Another controllable factor which no doubt lessens the frequency of thrombosis and embolism is gentle handling of the tissues and the minimizing of such operative traumatism as that produced by brutal tugging at retractors. The importance of care in this regard is universally recognized, but not by any means universally exemplified in surgical clinics.

Finally, a conscientious observance of the cardinal surgical principle of asepsis plays probably the most important role in diminishing the frequency of post-operative thrombosis and embolism, in view of what we have said as to the importance of low-grade infection in the causation of this complication. Once extensive pulmonary embolism has occurred, treatment is of little avail, the patient's chances for life being dependent largely upon her general resisting powers, and even more upon the size and location of the embolism. If death does not occur instantaneously, such rapidly-acting stimulants as camphor or ether are indicated, while the intense pain and distress often makes the administration of morphin necessary. The plan of operative removal of the embolus, as described by Trendelenberg, has so far been attended by unsatisfactory results. According to Busch, the Trendelenberg operation has so far been performed in 13 patients, but no patient has been saved. One case (Kruger's) lived for five days after the operation, dying of secondary infection.

The purpose of this brief communication has been not so much

to discuss the symptomatology or treatment of pulmonary embolism in general as to emphasize the ever-present danger of the occurrence of even fatal embolism after any form of abdominal or pelvic operation. Since fatal embolism is, comparatively speaking, an infrequent post-operative complication, it is apt to be overlooked by the surgeon in the consideration of the risks of a proposed operative procedure. Its occasional occurrence, therefore, is all the more distressing.

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POLLINOSIS (HAY FEVER)—A CONSIDERATION OF ITS TREATMENT BY ACTIVE IMMUNIZATION.

By Dr. Seymour Oppenheimer

and

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of New York City.

Definition.—Hay fever, or pollinosis, is a disease which manifests itself in the spring, from the latter part of May or the early part of June, until the middle or end of July, and in the autumn from the middle of August to the end of September or early October. It is characterized by itching of the eyes and lachrymation, itching of the palate and face, sneezing, serous discharge from the nose, obstructed breathing, and, if the attack is very severe, sooner or later coughing, difficult breathing accompanied by wheezing.

It is caused by the action of pollen grains from flowering plants. The pollen is carried by air currents and inspired with the air we breathe; if the recipient is susceptible to the particular pollen, an attack of pollinosis promptly ensues.

Etiology.—Many theories have been advanced as to the cause of hay fever, and a great number of speculations far afield of the true etiology have been entertained. Numerous physicans, even at the present time, consider that this disease is a neurosis. In 1902, Rudolph published a paper in which he stated that pollinosis should be classed with the degenerative psychoses of which he described two varieties, the hysteroid and the epileptoid forms. When bacteria were found to be the causative agents of various diseases, certain micro-organisms were then suggested as operative in pollinosis. Prominent among these were various vibrios,

and today vaccines of mixed bacteria are put forth commercially as a cure for this condition.

Elliotson suspected that pollen was the etiological factor in "hay fever," and in 1873, Blackley, as a result of various experiments with pollen, concluded that these small grains which were carried in the air during the flowering season of plants were the undoubted causative factor. But it was left to Dunbar and his coworkers to settle the question definitely. They examined the pollen of 30 varieties of graminaceae and cyperaceae and found them active; also active were swamp-pink, lily of the valley, hairy Solomon's Seal, rape and spinach. Their experiments led them to examine the plant which caused the condition in the United States, and they found that ragweed, golden-rod, asters and chrysanthemums caused symptoms when applied to the mucous membranes of susceptible individuals, while normal controls did not react.

There must necessarily be predisposing causes to this disease, as the vast majority of mankind is not affected by pollen, while to a small minority the contents of these kernels are intensely toxic. Thus we recognize two factors which are of importance in the etiology of "hay fever"—nasal and pharyngeal pathological conditions and heredity.

Among the nasal and pharyngeal conditions which would predispose to this disease are any obstructions, such as enlarged turbinate bodies, deviated septa, spurs, and adenoid vegetations; also any diseased conditions of the mucous membranes as are found in atrophic and hypertrophic rhinitis, and suppurative accessory sinus disease.

Heredity is an important factor in supplying subjects for this disease. There seems to be a particular permeability of the skin and mucous membranes transmitted from the parent who has suffered or is suffering with this or some allied ailment to his or her offspring. Among our patients were two brothers with hay fever, a brother and sister with hay fever, a lady with hay fever whose son suffers with asthma, two cases in which a father and one or more children suffer with hay fever, a young lady with hay fever who had intense eczema as a child and whose mother suffers with eczema, rebellious to treatment.

It is probably that pollinosis occurs the world over. We know it to be endemic in Europe, Africa, Asia and North America.

More males are affected than females.

It is found in all strata of society, and the reason that some writers think that it occurs mostly in cultured and highly strung people is because the poorer and less cultured classes are not so fastidious and are unable to pay much heed to a "cold in the head" which lasts six weeks every year.

Pathology.—Hay fever or pollinosis is not a fatal condition, and there exists no autopsy records of patients dying while suffering from symptoms of "hay fever." Thus our idea of the pathogenesis of this disease is based mainly on experimental and deduced evidence.

According to Dunbar, the pollen extract, which contains about 40 per cent. of protein, is a "toxin," the active portion of the protein being the albumin fraction. From our experiments and those of Koessler, we are not in accord with his views, because the action of this protein does not conform to the postulates of Ehrlich as regards true toxins, such as the toxin of diphtheria and tetanus. Nevertheless, pollen protein holds a position which is unique, inasmuch as it has toxin and non-toxin attributes. Although it is thermostabile, non-toxic to the majority of mankind and animals, the intoxication with pollen shows no incubation time (its action is almost immediate), still it is toxic in very minute doses, but only to sensitive individuals; it is completely specific; it produces antibodies when injected into animals and man, as demonstrated by complement fixation, but its toxin-antitoxin neutralization curve does not follow the law of multiple proportions.

In 1906 Wolff-Eisner suggested that this disease was a condition of anaphylaxis. Dunbar, in 1912, stated this condition is not one of anaphylaxis, based upon the following experimental data: He was not able to cause passive anaphylaxis in guinea pigs by injecting intravenously serum from hay-fever patients and 24 hours later injected intravenously a quantity of pollen extract; also that a condition of antianaphylaxis does not occur after the hay-fever attack. But, he has produced symptoms resembling anaphylaxis in hay-fever patients by injecting a large dose of pollen extract while normal controls gave no symptoms whatsoever with the same dose. He also showed that the pollen extract was capable of producing symptoms similar to anaphylactic shock in guinea pigs which had been previously injected with the same antigen.

We are opposed to Dunbar's view on this question from his experimental facts and our own experimental deductions. Our experience has shown that the amount of antibody in the serum of untreated pollinosis patients, excepting during the attack, is so small that it would be well-nigh impossible to obtain, and were it possible to obtain, it would be impossible to inject a sufficient amount of serum to sensitize the guinea pig.

On the other hand, Koessler was able to produce passive anaphylaxis in guinea pigs. He obtained the blood from patients while in the third week of their seasonal attack. Four c. c. of this serum was injected intracardially into guinea pigs, and 24 hours later they were reinjected with the same serum. All the animals so treated showed severe typical symptoms of anaphylaxis. Dunbar used hay-fever patients preceding the attack, while Koessler took the blood during the attack; therefore the discrepancy in the results.

Koessler tried to show that the pollen protein circulated freely in the blood of patients suffering with a seasonal attack of hay fever, and for this purpose obtained enough blood from a patient who had severe asthmatic symptoms to give 20 c. c. of serum. Four guinea pigs were injected subcutaneously with 5 c. c. of serum, and 12 to 18 days later were injected intracardially with 1 c. c. of

1-10,000 dilution of ragweed pollen extract, and 3 of the 4 guinea pigs showed severe typical symptoms of anaphylaxis. From this experiment he deduced that in the serum of his patient there was a pollen protein. This may be true, but it is possible to theorize on this from a different premise. It can be argued that the blood injected contained enough amboceptor to sensitize the guinea pigs against subsequent injection of the specific antigen.

Pollinosis is due, as previously stated, to a sensitization of an individual by the pollen contents through the respiratory tract. There must, however, be at the time of sensitization an abrasion of the mucous membrane so as to make absorption possible.

Symptoms:

A—Subjective.—When the annual attack is about due, the patient first notices an itching at the inner side of the eyes, which may disappear only to recur with greater intensity in a few days. This usually is accompanied by itching of the nose, the skin of the face and palate, which may continue for some time without becoming worse, but in due time the patient experiences fullness in the head, stuffiness of the nose, and in the morning, particularly, attacks of sneezing, followed by a sero-mucous discharge. At this time the eyelids itch intensely, so much so that the patient can hardly refrain from rubbing. Itching of the palate is also pronounced, and the patient very often scratches the palate with the finger. Weakness is complained of, and there is a disinclination to stir about. Perspiration is oftimes free. This condition continues, abating and increasing from time to time. If the nose is completely obstructed, as it usually is, sleeping is interfered with, and soon a cough supervenes and to the clinical picture is added attacks of shortness of breath and wheezing, particularly at night. At the end of the seasonal attack all of these symptoms gradually subside, leaving no evidence of the suffering and discomfort which has been endured. The spring variety usually does not last longer than four weeks, while the fall variety lasts about six weeks. Occasionally patients present themselves who suffer with "hay fever" symptoms throughout the entire summer.

B—Objective.—The eyelids appear red, the conjunctival blood vessels are engorged and the mucous membrane between them is whitish pink. There are occasionally small papular elevations in the skin of the face. The mucous membrane of the nose is swollen, the blood vessels are engorged and the mucous membrane between these blood vessels is also whitish pink. The palatal blood vessels are prominent and the intervening mucous membrane is anemic. The temperature of the patient ranges between 98 degrees and 101 degrees, seldom reaching 102 degrees. From this description it can readily be seen that the mucous membranes are not inflamed. They are more inclined to be pale, while the blood vessels which course through them are engorged.

Diagnosis.—Given a patient who periodically each spring or summer becomes ill with a sickness which corresponds to the description mentioned in the symptomatology, and if these symptoms

begin and end at approximately the same time each year, it can safely be said that the patient is suffering with pollen disease. The question before us now is, "Which pollen is operative in a given case?" To answer this query it is necessary to test the patient with the pollen of all the flowers which bloom during the time of the attack.

Methods.—There are three methods by which it is possible to know which pollen is operative in a given case. A drop of a weak extract of a given pollen may be instilled into the lower conjunctival sac of the eye. The one which produces congestion and swelling of the caruncle and mucous membrane of the lid is the one to which the patient is sensitive. A very minute quantity of the extract may be injected intracutaneously, and the pollen to which that patient is anaphylactic will cause swelling and redness around the spot where the pollen extract is deposited. A very minute quantity of pure pollen may be gently rubbed into a small scarification wound of the skin and a wheel will develop at and around this point of scarification if the patient is susceptible to that pollen. Some patients are sensitive to more than one pollen, and it seems that there may be in some cases a general susceptibility to all pollen, so that only when the reactions are marked is it possible to conclude that this is the specific pollen which is causative of hay fever in a given case.

To be sure that no other factor than the pollen is causing the reaction, it is advisable that a negative control be established by simultaneous vaccination of another patient. No swelling should occur in the control.

The majority of patients suffering with pollen disease are susceptible to the pollen of timothy, red-top and bluegrass, or to ragweed and golden-rod. Only the exceptional patient is anaphylactic to the pollen of other plants, but it is just these exceptional cases that give us the most trouble.

Prognosis.—Many patients become progressively worse each season, while with others the symptoms are milder after each attack. We are of the opinion that every case can be helped, the symptoms stopped or abated in severity, if the patient's resistance is such as to enable him to build up an immunity.

TREATMENT.

1. *Palliative.*—While the patients are suffering with the attack, it is possible to give them relief with drugs, particularly cocaine and adrenalin. Weak solutions of these may be instilled into the eyes and applied to the nose. In this way the itching of the eyes and obstructed breathing are mitigated. As soon as the effects of these drugs pass away, the patient suffers as before. Their continuous exhibition is fraught with dangers—the habit of cocaine snuffing may be acquired, and adrenalin has been found to cause an arteriosclerosis of the large blood vessels, due to the increased blood pressure which it produces.

Patients suffering with this disease may sojourn to localities at which the causative pollen-bearing flowers do not grow, such as

Fire Island, Green Mountains, White Mountains, and the higher altitudes of the Adirondack Mountains. A pilgrimage to these places must be made each year, and they must remain away the entire six weeks to avoid the disease.

2. *Curative.*—Before entering into a description of the methods advised for curative purposes, it is not amiss at this point to dilate upon the theoretical factors which have to be considered to understand the basis of such treatment. We have stated above that pollen disease is an anaphylaxis, and antianaphylaxis must be accomplished before a cure can be effected.

According to Rosenau, Anderson, Otto and others, if on the seventh, eighth or ninth day after the first injection, a massive rose of antigen is injected into the animal, the symptoms of anaphylaxis do not occur on exhibiting a dose of antigen on the twelfth day. This refractory condition so produced is called anti-anaphylaxis. This same animal will, 20 to 30 days later, become slightly sensitive to the antigen; the symptoms being mild, fatal reactions rarely occurring. The reason for this refractory condition so produced is answered by the researches of Neufeld and Dold, Kraus, Ritz and Sachs, Izar, Friedberg and Mita, Zinsser, and Bordet, who, working on the quantities of antigen, amboceptor and alexin, which would be most favorable for the production of anaphylatoxin in vitro, found that large quantities of the antigen as compared to the other ingredients inhibited the production of anaphylatoxin. They also showed that an excess of the amboceptor will produce the same result. In view of these facts, they conclude that the great concentration of antigen in the blood of the refractory animal inhibited the production of sufficient anaphylatoxin to cause symptoms.

Zinsser and Dwyer, working with typhoid anaphylatoxin, showed that guinea pigs treated with a sub-lethal dose of anaphylatoxin developed a tolerance which enabled them to resist one and one-half to two units of the poison, the tolerance developing within three days and lasting to a slight degree for as long as two months.

From the foregoing facts, hypothetically, it should be possible to treat patients suffering with pollinosis by one of four methods:

1. By injecting a dose of pollen extract just before the "hay fever" time and repeating the procedure in 20 to 30 days.

2. By injecting a large quantity of immune serum during the attack. This we have accomplished in one of our cases. From G. G., a patient who received 45 injections of ragweed extract, we took about two ounces of blood from a vein; after the proper precautions of a Wassermann reaction, we injected 8 c. c. of the serum subcutaneously into a patient of 13 years, suffering at the time with a violent attack of "hay fever." Within 36 hours this little patient had no symptoms of hay fever and no signs of the disease returned during the entire season.

3. By injecting very small amounts of pollen extract at intervals of 10 days or less, so that only minute quantities of anaphylatoxin be formed and the patient's tolerance raised.

4. By injecting very small doses of anaphylatoxin made in vitro to produce the same results as in method number 3.

A. *Passive Immunization.*—Weichhart has placed on the market a prepartion which he terms Graminol. It is a serum taken from the cattle during the "hay fever" time. Graminol does not contain specific antibodies, but it is said to give relief in from 61 to 75 per cent. of cases, according to the report of the German Hay Fever Association.

By repeated injections of pollen extract into horses and rabbits, Dunbar and his associates were able to produce an immunity in these animals, as tested by the complement fixation reaction, especially in rabbits, whose serum in some cases would fix complement in dilutions of 1-50,000. Dunbar has transferred passive immunity to individuals by injecting the serum of these animals.

From these experiments he has evolved his Pollantin, which he considers a specific in the treatment of pollinosis. Pollantin is a horse serum antitoxin and in itself can produce the condition of anaphylaxis by repeated use, and thus interferes with the cure that it is supposed to accomplish. This product, in our hands, has been a failure, notwithstanding that the German Hay Fever Association has reported 59 to 69 per cent. of successful results with Pollantin.

The action of these two preparations may be explained as follows: They undoubtedly contain antibodies; in the case of Pollantin, the antibodies are specific, while those in Graminol are not specific; nevertheless, these antibodies furnish the necessary element for the binding of the complement in the secretions of the respiratory mucous membranes to the pollen contents or antigen. This effects a rapid digestion of the antigen into harmless products, such as amino acids, and thus the toxic material does not remain long enough in contact with the tissues to produce symptoms.

B. *Active Immunization.*—Holbrook Curtis was probably the first investigator to effect an active immunity in pollen disease. This observer as early as 1900 reported favorably on this subject. He used aqueous and alcoholic extracts of the flowers and pollen of ragweed, golden-rod and lily of the valley. These were administered subcutaneously and by mouth.

Dunbar, in the earlier period of his investigations on this subject, tried to produce active immunization by injecting the pollen extract, but came to the conclusion that such immunity could not be secured by this means. He failed probably because the pollen which he used may not have been the only pollen which caused the disease in the cases which he treated; furthermore, he used an excessive dosage, which, from our present experience, breaks down the defensive potentialities of the patient, thus frustrating the result which he desired.

Noon and Freeman, in 1911, published the results of their work on the active immunization of pollinosis by injecting gradually increasing doses of timothy grass pollen extract. They reported 18

cases. Excellent results were obtained in three, thirteen were markedly improved, while two cases were not benefited.

In a preliminary report, Clowes in 1913 gave his results on the treatment of eight cases of pollinosis. All of the cases were satisfactorily influenced.

Koessler, between 1910 and 1914, had treated 41 cases, of which four were cured, twenty-nine markedly improved and eight were not benefited.

Eleven cases were treated in 1914, before and during the season for autumnal catarrh. Six cases were treated in advance of the attack. One of these was cured for the season, four had very mild symptoms, and one was not improved. Five cases were treated during the attack. The symptoms of four subsided after receiving from one to four injections, whereas one patient received no benefit. Altogether, there were five cures for the season. In four cases there was marked improvement. Of the two cases that were not improved, one had a polypoidal degeneration of the middle turbinate, with underlying bone necrosis. The patient had distinct asthmatic attacks every night, and it was impossible to say whether the attacks were due to his pollinosis or to the local nasal condition. The other was a physician, who reacted both to ragweed and golden-rod pollen. He received in all 33 injections, alternating the ragweed and the golden-rod extracts. He came very irregularly for treatment. It is possible that at times the treatment was too intensive and his physical condition was so poor that possibly he could not develop a tolerance.

Nine of our cases reacted to ragweed pollen and two reacted to that of both ragweed and golden-rod. Both of these latter cases received both golden-rod and ragweed antigen hypodermically. One was cured, but the other was not improved. When a patient is sensitive to more than one pollen, individual doses of each extract should be administered, in order to determine when the tolerance is sufficiently raised for each. Mixing the antigen is too imperical.

There are two ways of determining when a patient has become sufficiently immune to warrant discontinuance of the treatment.

1. With a complement fixation test.

2. From the size, intensity and duration of the wheal produced by skin scarification at different times, namely, before and during the treatment.

The scarification method is the one we have generally used to diagnose and determine the degree of immunity induced. The wheal produced by the initial vaccination is measured, its time of appearance and its duration noted. After five or six treatments the patient is revaccinated and the wheal is observed again as before, and compared with the former results. When the wheal is very small or does not appear, the patient is sufficiently immune and probably will go through the season with very mild symptoms or none at all.

Naturally, the question arises whether such immunization is per-

manent. We believe it is safe to say that, while the immunity may not be successfully carried over to the succeeding year, recurrences are much milder at least and patients require less re-immunization. An attack the following year can probably be overcome by very few injections.

The best time to begin treatment is probably about 10 weeks before the attack may be expected to occur. Regularity of attendance at about weekly intervals is important.

We feel that cures were not accomplished in two cases because treatment was begun too early, and in two other cases because the patients were treated too irregularly. Furthermore, it is probable that some of these cases were susceptible to pollen other than that of ragweed and golden-rod. At the time of our initial work we were not prepared with as large a variety of pollens as we now possess for the continuance of this work along broader lines, which we hope in the future will enable us to bring about a large percentage of cases influenced by our attempts at immunization.

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Book Reviews.

THE CANCER PROBLEM. By William Seaman Bainbridge, A.M., M.D., Sc. D., Professor of Surgery, New York Polytechnic Medical School and Hospital; Surgeon and Secretary of Committee of Scientific Research, New York Skin and Cancer Hospital; President, First International Congress for the Studies of Tumors and Cancers, Heidelberg, 1906. New York: The Macmillan Company. 1914. Cloth, $4 net.

Cancer is one of the problems of medicine still defying solution as regards early diagnosis, prevention and guarantee of permanency of cure. In fact it is the most important problem confronting the profession today, as in civilized countries alone more than half a million fall victims annually. It is therefore especially important that ever and ever the attention of the profession and laity be called to the ravages wrought by this malady. As long as the people feel secure they will fail to recognize the importance of devising ways and means for conquering cancer. It was with this idea in view that many of the leading journals of the country recently devoted an issue to the cancer problem, and it is with this idea in view that Dr. W. S. Bainbridge has just issued a book dealing with the various phases of cancer, its early history, its modern history, the various agencies formed for its suppression, theories as regards its causation, statistical considerations, histopathology, a résumé of the world's work in cancer research, diagnosis, and lines of treatment, etc. No more important work has been issued to the profession within recent years. Cancer has become a human scourge, which bids fair, unless conquered, to annihilate the race. Undoubtedly it is on the increase and is ever

attacking younger and younger people. Bainbridge's book thoroughly posts one on each and every feature of the cancer problem. It neither underestimates or exaggerates the importance of the problem, but plainly, succinctly and tersely tells what is what, and what may be expected from constant agitation of the question. Every physician, as well as every intelligent laymen, should read the book, and then all will be able more intelligently to grapple with the malignant problem.

Fractures and Dislocations. By Miller E. Preston, A.B., M.D., First Lieutenant, M. R. C., U. S. A.; formerly Police Surgeon, City and County of Denver; Surgical Examiner, Colorado State Board of Medical Examiners; Instructor in Anatomy, University of Denver, and Visiting Gynecologist to City and County Hospital, Denver, Colorado. With a Chapter on Röentgenology. By H. G. Stover, M.D., Professor of Röentgenology, School of Medicine, University of Colorado; Member of American Röentgen-Ray Society; Visiting Röentgenologist to City and County Hospital, St. Joseph's Hospital and Children's Hospital, Denver, Colorado. 860 illustrations. St. Louis: C. V. Mosby Company. Cloth. $6.50 net. 1915.

Fracture may be followed by such dire results to the victim that a thorough grounding in the principles of handling fractures is absolutely essential to student and general practitioner alike. Since the introduction of the X-ray there has been a tendency on the part of physicians, and especially surgeons, to resort to operative measures owing to the false impression conveyed as to the extent of the bone deformity. Operation is all right in its place, *i. e.*, where one is to suppose loss of function will result without operation. We have in mind a patient whose radiograph suggested that operation was the best procedure to give the patient a good functional result. Therefore he was advised thus, consented and was duly operated. Lo, to the operators' chagrin, a subsequent radiograph showed worse position under bone plating than by non-operative measures. But here is the lesson: the surgeon under the circumstances decided to await developments, and, much to his satisfaction, he was rewarded with an excellent functional result, the patient being thoroughly satisfied and being able to resume his work of laborer without any inconvenience or drawbacks. To us this case is a lesson in being less hasty in advising operation, and the reviewer thoroughly believes this operative paranoia in fracture has about reached the crest of its popularity, and many a fracture victim will be spared from now on the knife. It is these and other phases that the book before us considers, and be it to the credit of the writer in a very excellent manner. While conservative, he is not too much so, showing everywhere a nice balance between the method to be employed in a certain fracture under certain circumstances. Taken all in all, this book will be

found an excellent guide to both student and practicing physician. It is richly illustrated with, on the whole, original photographs, taken mostly soon after the injury was received. Another feature worthy of note is the introduction of Doctor Albee's work on autogenous bone grafting. This feature alone should render the work a valuable contribution to surgical literature, as it is not found in any other publication. Doctor Preston has given the profession a very meritorious work, in fact a work which should gain immediate popularity. It is practical, well written and profusely embellished with illustrations. It lacks nothing in completeness. It gives us, therefore, great pleasure to highly commend it to our readers.

THE TREATMENT OF FRACTURES. With Notes Upon a Few Common Dislocations. By Charles Locke Scudder, M.D., Surgeon to the Massachusetts General Hospital; Associate in Surgery at the Harvard Medical School; Fellow American Surgical Association; Member of the American Urological Association, and of the American Society of Clinical Surgery. Eighth edition, revised. With 1057 illustrations. Philadelphia and London: W. B. Saunders Company. Baltimore. The Medical Standard Book Co. 1915. Cloth. $6 net.

Scudder's "Treatment of Fractures" needs no introduction. Its usefulness has already been proven by the number of friends which previous editions have made. Since the appearance of the last edition a great amount of work has been done in the implantation of bone graft in delayed fracture. It is this aspect of fracture surgery that has received in the present edition the prominence demanded by its importance. Fractures which will not unite by any other method of treatment have united by the implantation of a piece of bone between the fractured segments. Dr. Scudder explains the technic of bone grafting thoroughly and the method which he has found most satisfactory in his hands, as well as the failures and the cause of such. The book is now, therefore, brought up to the minute, and with the additions incorporated should and will prove as useful as any of its predecessors. As heretofore, the treatment, symptomatology, etiology and prognosis will be found rational, conservative and thoroughly reliable. The numerous illustrations add materially to the scope of the book, which is written in that inimitable style of the author.

DIFFERENTIAL DIAGNOSIS. Volume II. Presented Through an Analysis of 317 Cases. By Richard C. Cabot, M.D., Assistant Professor of Clinical Medicine, Harvard University Medical School, Boston; Chief of the West Medical Service at the Massachusetts General Hospital. Profusely illustrated. Philadelphia and London: W. B. Saunders Company. Baltimore: The Medical Standard Book Co. 1914. Cloth. $5.50 net.

In this book 19 common symptoms have been analyzed, dissected

and discussed by the case system. Amongst the subjects treated are abdominal and other tumors, vertigo, diarrhea, dyspepsia, hemoptysis, hematemesis, melena, hoarseness, pallor, polyuria, tremor, etc. In nowise can a condition be better fixed in the student's mind than by the citation of a history in connection with a discussion as to the possible disease leading up to the symptom or symptoms. Doctor Cabot is a real expert in this method of instruction. If one had not had the pleasure to listen to his pedagogic methods, one would naturally come to the same conclusion from the book. The book is sure to exert an immense influence by showing students how to think logically. It will teach the lesson of thoroughness, carefulness and patience as a necessary attribute in arriving at diagnoses.

Operative Gynecology. By Harry Sturgeon Crossen, M.D., F.A.C.S., Associate in Gynecology, Washington University Medical School, and Associate Gynecologist to the Barnes Hospital; Gynecologist to St. Luke's Hospital, Missouri Baptist Sanitarium, and St. Louis Mullanphy Hospital; Fellow of the American Gynecological Society and of the American Association of Obstetricians and Gynecologists. Seven hundred and seventy original illustrations. St. Louis: C. V. Mosby Company. 1915. Cloth. $7.50 net.

As the name implies, the above work is devoted exclusively to operative gynecology. Both the external and internal female organs of generation are subject to surgical attack for various disorders. The author endeavors to give to the profession those procedures which he has found most available, practical and useful in each and every malady of these organs. The technic of abdominal section, including both the pre- and post-operative, is simply but forcibly set forth, likewise those procedures most used in vaginal, pudendal, the uterus and its adnexa. A most attractive feature of the volume is the illustrations. This feature will appeal to all, as the cuts are works of art and will materially aid in digesting the text. Encompassing as it does the very latest operative ideas in gynecological technic, and presenting them in a systematic manner, cannot but help rendering the volume attractive to the gynecologist, as well as general surgeon. It therefore gives us great pleasure to heartily recommend the book to our readers.

Swat the Fly. By Eleanor Gates, author of "The Poor Little Rich Girl," "We Are Seven," etc. New York: The Arrow Publishing Co. Cloth, 25 cents. 1915.

This is an one-act fantasy emphasizing the importance of slaughtering the fly, a most prolific agent, as you are all aware, in the spread of disease. The story is told in a fashion so direct that he who has eyes must see and he who has ears must believe. It should go a long way in educating the public as to the fly nuisance and the many loathsome diseases which this insect is capable of disseminating.

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BALTIMORE, SEPTEMBER, 1915

THE MIDWIFE, WHY?

TO PRACTICE medicine one must have obtained at least a high-school education, besides a year's college equivalent in modern language, biology, physics and chemistry. But the requirements do not stop here; the doctor in the making must have put in four years' residence at a college of medicine and must have received its degree. Is he able to engage in the practice of his chosen profession after this indenture? By all means, no. So as to protect the laity from incompetency further restrictions are thrown around the aspirant to medical glory in the form of the boards of medical licensure, before whom he must appear and submit satisfactory evidence that he is competent to engage in the practice of medicine. Yet, if, by a streak of bad luck, the applicant should fail to meet the requirements of the board before whom he appeared, the penalty of engaging in practice would be prosecution for illegal practice of medicine, with a probable jail sentence appended as a slight reminder not to transgress again. Such, then, are the legal restrictions thrown around the practice of medicine—a fairly comprehensive literary education, four years in a school of medicine and the successful passing of an examination before a State board of medical examiners. Now, let us examine another picture—that of the midwife. At the outset we are willing to admit that conditions here have been somewhat improved within the past few years, but conditions even so are far from satisfactory. Why should anyone be permitted to practice a most important branch of medicine without a general medical course? Why should anyone without an idea of the English language be entrusted with the handling of cases the outcome of which means so much to the State? Why should anyone without the least idea of chemistry, anatomy, physiology, pathology, etc., of labor, be given the privilege of dealing in this, one of the most important branches of medicine? It is most arrant rot and nonsense to justify ourselves on the grounds that the institution has been handed down from our progenitors. Times have changed,

and so should we with them. Progress has been made in all other lines of medicine, so here also, and with these changes should come a determined attack by the medical profession upon an unbearable condition. It is not sufficient to say that laws have been promulgated which make it a misdemeanor for a midwife to handle a case of pregnancy with complications. For how is one to prove that the midwife is or has actually engaged in the treatment of any particular case? We have it from an undoubtedly trustworthy source that a midwife has administered ergot, and with such an outcome and so ignorantly as to cause severe enough contractions of the uterus as to produce rupture. We also have it from the same source that there are a number of midwives in his section of the city who cannot speak English. And, again, this informant tells us that he positively knows that these same women resort to internal examination of their patients and that they do not employ silver nitrate. This physician only recently told us that he at this very moment has a child, who was delivered by a midwife, under his care for gonorrheal ophthalmia. What would be the result if a graduate in medicine failed to pass the State board, but hung out a sign as Mr. So-and-So, practitioner of midwifery? Go a step further. Say that this unfortunate graduate had done so well in obstetrics as to make a perfect mark before the college authorities, and even before the State board made a creditable examination in this particular subject? To our mind, there is not the least bit of a doubt but that he would be prosecuted for the illegal practice of medicine. If, then, a man of this caliber is prohibited, by legal restrictions; if, then, one so much superior to the dirty old midwife, who, at most, may have only seen a case or two before entering upon her vocation, is prevented by law from practicing midwifery, surely there is no earthly reason why the midwife evil should be a thorn in the medical profession. Right is right, and wrong is wrong, no matter where met. If it is right and just that the doctor of medicine shall pass an examination before engaging in midwifery, it is only just that the midwife should be compelled to meet the same requirements. Therefore, let us all work for the perpetual abolishment of a system so fraught with the potentialities of dire results to mother and offspring. The medical profession owes this much to the indigent. No time is better than the present to start a campaign against the midwife. Let physicians send in their experiences, and the Maryland Medical Journal will be only too glad to publish them, so that the Committee on Midwifery of the Medical and Chirurgical Faculty will have something tangible on which to work.

Summary of Results of Examination Held by the Board of Medical Examiners of Maryland, June 15, 16, 17 and 18, 1915.

No.	College of Graduation	Anatomy	Surgery	Pathology	Obstetrics	Practice	Chemistry	Materia Medica	Therapeutics	Physiology	Total	Average
1	Maryland Medical, '12	58	79	75	63	69	52	70	45	67	578	64
2	Medical College of Virginia, '14	50	..	71	..	67	64	..	..	77	...	..
3	College Physicians and Surgs., Balto., '14	77	81	65	87	76	70	75	77	75	683	76
4	College Physicians and Surgs., Balto., '13	66	89	75	72	75	50	85	93	76	681	76
5	University of Maryland, '14	77	90	81	90	76	70	75	67	88	714	79
6	Johns Hopkins, '15	87	90	86	87	75	80	92	95	96	788	87
7	Johns Hopkins, '15	93	98	90	93	82	93	86	98	89	822	91
8	Johns Hopkins, '15	95	89	81	84	76	97	43	76	80	721	80
9	Johns Hopkins, '15	80	99	94	94	78	95	77	100	82	799	89
10	Johns Hopkins, '15	93	92	84	83	82	100	75	84	77	770	85
11	Johns Hopkins	94	..	..	..	..	94	75	..	95	...	..
12	University of Maryland, '12	85	91	85	91	79	95	75	83	80	764	85
13	Johns Hopkins, '15	90	88	92	92	75	96	87	96	75	791	88
14	Johns Hopkins, '15	82	85	64	74	83	85	75	76	75	699	78
15	Johns Hopkins, '15	86	89	77	99	82	100	83	98	88	802	89
16	Johns Hopkins, '12	84	98	85	89	80	80	77	64	86	743	82
17	Johns Hopkins, '15	79	90	88	89	75	95	57	89	77	730	81
18	Georgetown University, '11	70	76	73	91	75	59	75	86	75	680	75
19	Johns Hopkins, '14	60	75	80	75	77	78	71	84	94	694	77
20	Johns Hopkins, '13	89	81	90	83	82	90	85	81	96	777	86
21	Johns Hopkins, '15	77	82	73	86	78	65	75	66	88	690	77
22	Johns Hopkins, '15	81	85	75	80	76	100	66	75	78	716	79
23	Johns Hopkins, '15	93	86	99	93	79	100	67	90	75	782	87
24	Johns Hopkins	98	..	..	..	..	98	53	..	86	...	..
25	Temple University, '15	82	80	77	88	76	86	80	86	82	737	82
26	Johns Hopkins, '15	70	83	80	87	88	88	69	75	85	725	80
27	University of Maryland, '14	69	..	46	72	75	76	..	..	61	...	..
28	University of Maryland, '15	90	79	94	96	80	97	89	86	83	794	88
29	Johns Hopkins, '15	88	81	69	84	75	85	75	80	81	718	80
30	Johns Hopkins, '15	82	84	75	89	83	97	75	82	86	753	84
31	Johns Hopkins, '15	83	84	78	90	87	100	75	76	85	758	84
32	University of Maryland	72	..	..	..	..	45	50	..	70	...	..
33	University of Maryland, '15	73	75	80	90	75	77	75	77	67	689	76
34	College Physicians and Surgs., Balto., '14	..	72	60	90	75	80	..	..	..	...	..
35	College Physicians and Surgs., Balto., '14	69	..	60	..	63	80	62	39	75	...	..
36	Howard University, '14	73	68	68	65	75	65	80	49	78	621	69
37	Johns Hopkins	86	..	..	..	..	100	80	..	83	...	..
38	Howard University, '13	74	75	74	79	75	82	75	71	75	680	75
39	Johns Hopkins	92	..	..	..	..	90	80	..	83	...	..
40	Johns Hopkins	75	..	..	..	..	98	75	..	87	...	..
41	College Physicians and Surgs., Balto., '13	75	75	65	82	64	65	64	89	80	659	73
42	University of Maryland, '15	96	90	85	97	81	95	89	100	90	823	91
43	University of Maryland, '15	76	85	73	87	81	94	77	76	75	724	80
44	University of Maryland, '15	89	88	94	90	75	90	90	82	84	773	86
45	Johns Hopkins, '15	88	93	86	90	87	92	84	95	84	799	89
46	Johns Hopkins, '15	78	79	76	74	71	98	60	75	67	678	75
47	Johns Hopkins, '15	89	88	88	85	75	96	75	84	75	755	84
48	College Physicians and Surgs., Balto., '15	93	93	75	82	81	83	82	77	85	751	83
49	Johns Hopkins	64	..	..	..	..	90	58	..	89	...	..
50	University of Maryland, '15	76	84	66	92	75	64	84	87	70	698	77
51	Johns Hopkins, '15	95	86	92	88	77	100	95	84	89	806	89
52	University of Maryland, '15	80	87	85	94	83	89	62	88	64	732	81
53	University of Maryland, '15	85	88	90	88	81	97	80	84	78	771	86
54	Johns Hopkins	60	..	..	..	..	68	52	..	70	...	..
55	Maryland Medical, '13	..	..	58	..	..	..	..	..	..	...	..
56	Rush Medical College, Chicago, '05	87	84	84	96	80	99	92	89	88	799	89
57	College Physicians and Surgs., Balto., '15	92	91	95	95	78	90	84	100	93	818	91
58	Johns Hopkins, '14	84	89	64	76	75	68	60	86	75	677	75
59	University of Maryland	61	..	..	..	..	80	68	..	80	...	..
60	Maryland Medical, '10	40	..	..	64	54	..	75	..	..	...	..
61	College Physicians and Surgs., Balto., '14	75	81	55	81	83	45	75	64	70	629	69
62	University of Maryland, '15	79	88	80	92	71	75	81	78	80	724	80
63	Johns Hopkins	85	..	..	..	..	98	75	..	82	...	..

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Summary of Results of Examination Held by the Board of Medical Examiners of Maryland, June 15, 16, 17 and 18, 1915.—(*Continued.*)

No.	College of Graduation.	Anatomy	Surgery	Pathology	Obstetrics	Practice	Chemistry	Materia Medica	Therapeutics	Physiology	Total	Average
64	University of Maryland, '15	83	84	84	92	75	85	90	81	82	759	84
65	Johns Hopkins, '15	75	85	78	90	79	84	44	75	65	675	75
66	Johns Hopkins, '13	81	91	94	91	84	95	75	76	87	774	86
67	Johns Hopkins, '06	93	87	91	85	84	88	80	82	91	781	87
68	Johns Hopkins, '15	86	86	95	92	86	98	90	79	75	787	87
69	Johns Hopkins, '09	97	93	95	88	79	98	90	100	88	828	92
70	University of Maryland, '15	87	90	83	85	64	83	85	75	88	740	82
72	University of Maryland, '15	94	77	89	86	67	91	79	87	75	745	83
73	Johns Hopkins	78	..	..	..	..	100	78	..	89	...	..
74	Maryland Medical, '12	68	..	54	..	67	..	..	..	..	...	..
75	Johns Hopkins, '15	79	87	76	90	75	70	80	61	83	701	78
76	University of Maryland, '15	91	86	72	87	79	100	76	78	83	752	83
77	University of Maryland, '15	74	84	82	97	82	84	79	86	80	748	83
78	University of Louisville, '12	49	..	..	..	..	70	..	..	..	...	..
79	Johns Hopkins	37	..	..	..	..	75	48	..	68	...	..
80	Jefferson Medical, '15	79	93	78	90	89	81	67	72	63	712	79
81	Johns Hopkins, '15	90	90	93	92	75	97	86	92	88	803	89
82	Johns Hopkins	79	..	..	..	..	90	75	..	75	...	..
83	Johns Hopkins, '15	88	91	78	84	75	70	67	69	82	704	78
84	University of Maryland, '15	80	87	88	91	55	70	75	37	92	675	75
85	University of Maryland	82	..	..	..	..	82	88	..	82	...	..
86	Johns Hopkins	73	..	..	..	..	76	77	..	87	...	..
87	Georgetown University, '15	94	92	91	98	83	84	75	75	83	775	86
88	University of Virginia, '13	80	84	75	78	75	65	56	85	77	675	75
89	Howard Medical, '14	71	85	65	73	71	80	75	72	69	661	73
90	Chicago College of Medicine, '15	87	92	76	96	81	79	75	86	79	751	83
91	University of Maryland, '15	94	86	82	90	76	99	93	76	75	771	86
92	University of Maryland	79	..	..	..	..	75	88	..	88	...	..
93	Johns Hopkins, '15	79	92	78	78	75	76	80	82	80	720	80
94	University of Maryland, '15	77	77	70	65	75	70	60	73	85	652	72
95	University of Maryland	85	..	..	..	..	65	69	..	82	...	..
96	University of Maryland, '15	83	84	67	82	75	75	67	67	84	684	76
97	University of Maryland, '15	76	80	76	80	80	75	75	80	90	712	79
98	Bennett Medical, '14	46	76	49	82	68	40	..	..	..	...	..
99	College Physicians and Surgs., Balto., '15	74	84	89	81	80	60	75	69	84	696	77
100	University of Maryland, '15	92	91	89	94	80	99	93	91	83	812	90
101	College Physicians and Surgs., Balto., '15	88	90	92	92	76	75	80	76	91	760	84
102	University of Maryland, '15	79	92	80	91	86	89	79	86	81	763	85
103	University of Maryland	77	..	..	..	..	57	66	..	86	...	..
104	University of Maryland	68	..	..	..	..	75	50	..	75	...	..
105	University of Maryland	75	..	..	..	..	78	77	..	80	...	..
106	University of Maryland, '15	75	88	90	80	75	75	66	81	81	711	79
107	University of Maryland, '15	83	91	79	81	75	95	89	87	75	755	84
108	Johns Hopkins	68	..	..	..	..	90	75	..	81	...	..
109	University of Maryland, '15	Failed to appear.										
110	University of Maryland, '15	90	85	91	92	87	80	84	94	88	791	88
111	Johns Hopkins	86	..	..	..	..	75	87	..	96	...	..
112	University of Maryland, '15	80	90	82	88	76	79	80	78	85	738	82
113	University of Maryland, '15	91	76	85	79	75	80	84	88	77	735	82
114	University of Maryland, '15	90	85	71	89	80	77	78	71	81	722	80
115	Medical College of Virginia, '12	57	69	27	54	64	61	64	45	58	499	55
116	University of Maryland, '15	80	88	86	89	79	86	84	96	80	768	85
117	College Physicians and Surgs., Balto., '15	70	80	80	88	75	75	67	64	79	678	75
118	Maryland Medical College, '13	21	..	54	..	..	20	75	77	33	...	..
119	Howard Medical, '14	55	..	..	..	..	70	75	50	65	...	..
120	University of Maryland, '15	85	90	82	85	78	88	83	82	90	763	85
121	Harvard Medical School, '15	76	73	75	90	76	50	55	70	79	644	71

In the above summary an average of 75 is required of those participating in the examination for the first time in order to secure a license. Those who have failed are eligible to re-examination at the expiration of six months. They are then obliged to receive a rating of 75 in each branch in which they are re-examined before license can be issued. Under the Maryland laws, students who, at the end of their second year, have successfully passed their college examination in Anatomy, Chemistry, Materia Medica and Physiology are entitled to examination by the Board of Medical Examiners in these branches. The ratings made by these students in the examination known as the "second-year examination" are carried forward and made part of the final examination, when an average of 75 must be obtained to secure a license. We trust that this statement will make clear the apparently incomplete examination of certain participants.

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REPORT OF BOARD OF MEDICAL EXAMINERS OF MARYLAND.

QUESTIONS AT THE JUNE (1915) EXAMINATIONS.

OBSTETRICS AND GYNECOLOGY.

1. Give the subjective and objective signs of pregnancy.

2. Into what classes is extra-uterine pregnancy divided? Give diagnosis and treatment at time of rupture.

3. Give Crede's method of delivering the placenta, and what are its advantages.

4. Give treatment of transverse position with arm protruding.

5. Explain fully when, and how, you would use a pair of axis-traction forceps.

6. Define the three stages of labor.

7. What are the relative and absolute indications for Cesarean section?

8. Define (a) Menorrhagia. (b) Metrorrhagia. (c) Dysmenorrhea. (d) Amenorrhea.

9. Give diagnosis of cancer of the uterus.

10. Give the different methods of treating prolapsed uterus.

SURGERY.

1. What is trachoma? Give signs, symptoms and treatment.

2. Give signs, symptoms and differential diagnosis of carcinoma of the tongue. Outline the treatment.

3. Give the symptoms, diagnosis and treatment of tuberculosis of the kidney.

4. Name the varieties of fistula-in-ano and give treatment.

5. State the avenues and possible points of metastasis of a malignant growth of the breast. On what symptoms may an early diagnosis of cancer of the breast be based?

6. How would you diagnose and treat a case of fracture of both bones of the forearm, occurring at the middle third?

7. Symptomatology and treatment of acute catarrhal otitis media.

8. Give symptoms, diagnosis and treatment of Pott's disease in the dorsal region.

9. Name the cardinal symptoms of brain tumor.

10. Give the differential diagnosis between cholelithiasis and appendicitis.

PRACTICE.

1. Define (a) Define blood pressure. (b) What is high blood pressure? (c) Give causes. (d) What do you mean by systolic and diastolic blood pressure? (e) Name some conditions in which it is a prominent symptom, and give treatment.

2. Differentiate the fevers of typhoid, malaria and early tuberculosis.

3. Differentiate follicular tonsillitis and diphtheria.

4. Differentiate epilepsy and hysteria.

5. Give diagnosis of acute chorea and the most common complication, and give treatment.

6. Give treatment of pneumonia.

7. Give diagnosis and treatment of empyema.

8. Give treatment of acute nephritis.

9. Give diagnosis and treatment of locomotor ataxia.

10. Give treatment of cholera infantum.

PATHOLOGY.

1. What changes occur in the mucous membrane of the lungs in acute bronchitis?

2. Mention some causes of and describe the changes in the vessels occurring in arteriosclerosis.

3. Describe the hookworm and give its life history.

4. Describe the morbid changes occurring in acute emphysematous gangrene.

5. Describe the process of recovering from a burn which destroys the skin.

6. Define cyst, cytolysis, diapedesis, mitosis.

7. Discuss edema.

8. Describe the bacillus of typhoid fever.

9. What may take place if a foreign body is buried in living tissue, and why?

10. What is a sequestrum? Describe its formation.

PHYSIOLOGY.

1. Define physiology and state what is meant by the physiological effect of a drug. Give examples.

2. (a) Give chief functions of connective tissue. (b) Epithelial tissue. (c) Adipose tissue. (d) Bone.

3. (a) Into what general classes are foods divided? (b) Give examples of each. (c) Give functions of each class of food in the nutrition process.

4. (a) What is meant by the respiratory sounds? (b) Where is the respiratory center? (c) How can you estimate the quantity of air breathed?

5. (a) Describe the nerve cells and state how they are classified. (b) What is meant by nerve centers?

6. Define digestion, absorption, nutrition, secretion and excretion.

7. Salivary glands. (a) Describe histological structure. (b) Secretion. (c) Innervation. (d) Influence of the secretion on normal digestion.

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8. What factors are concerned in the production and maintenance of blood pressure? Give normal blood pressure in adult.

9. Describe the effects of inhalation of carbon monoxide, and of carbon dioxide on the human system.

10. Discuss the effect of alcohol on the human system.

MATERIA MEDICA.

1. Arsenic. (a) Give the official preparations and doses. (b) Give the antidote for acute arsenical poisoning.

2. Silver. (a) Give the official preparations. (b) The incompatible. (c) Name some of the organic silver salts in use. (d) What is the result of mixing silver and creosote?

3. Ipecac. (a) Describe it. (b) Give the official preparations and doses. (c) Name some of the unofficial preparations and doses.

4. Define germicide, antiseptic, deodorizer, anaesthetic, anodyne, and hypnotic, and give two examples of each.

5. Zinc. Give official preparations and doses.

6. Give the average hypodermic dose of the following: Nitroglycerine, strychnine sulphate, atropine sulphate, morphine sulphate, apomorphine hydrochloride, pilocarpine hydrochloride, and Norwoods tincture of veratrum.

7. Define and give examples of the following classes of drugs: Vermicides, diuretics, diaphoretics and emetics, and give doses.

8. State what you know of electricity as a medicinal agent and method of application or administration.

9. Write a prescription, using official terms, for an adult—dose to be given after each meal—of iron, arsenic, quinine, strychnine and gentian. One containing three drugs as a diuretic, one containing at least two drugs as an expectorant cough mixture.

10. Name three drugs that are circulatory stimulants, three circulatory depressants, and give dose of each. Also define vasoconstrictors and vasodilators. Give doses and methods of using each.

THERAPEUTICS.

1. Give the therapy and describe the operation of paracentesis thoracis.

2. Give the therapy and dosage of digipuratum and preferable methods of administration.

3. Give the indications for and physiological action of venesection.

4. Write a prescription in Latin, without abbreviation, containing four ingredients, stating the condition for which it is to be used, with directions for administration.

5. Give the physiological action of valerian.

6. Give the physiological action and therapy of the "lead salts" and treatment of plumbism.

7. Resorcin, its physiological action and therapy, compared with acid carbolic.

8. Differentiate the indications for employment of pituitary extract.

9. Physiological action of rhus toxicodendron, signs of poisoning and treatment.

10. Pilocarpin, physiological action and therapy.

ANATOMY.

1. Describe the middle ear.

2. Origin, course and distribution musculospiral nerve.

3. Describe minute anatomy of kidney.

4. (a) What are the divisions of the brain? (b) Name the principal fissures. (c) What fissures divide each hemisphere into lobes? (d) Name the lobes of the brain. (e) Of what does the corpus callosum consist?

5. Locate surface lines dividing abdominal cavity into regions. Name regions and state contents of lower right-hand region.

6. Name structures transmitted through any two of these three foramina: (a) Foramen magnum. (b) Sphenoidal foramen. (c) Optic foramen.

7. Describe and give anatomical relations of vermiform appendix.

8. Name varieties of inguinal hernia and give difference in varieties.

9. What bones enter into formation of knee joint? Name ligaments of knee joint.

10. Origin, insertion, action and nerve supply of following muscles: (a) External pterygoid. (b) Pectoralis minor. (c) Triceps extensor cubitis. (d) Peroneus brevis.

CHEMISTRY.

1. State the law of multiple proportions and give illustration.

2. What are oxidizing agents? Give examples.

3. What is the action of chlorine on metals, water, ammonia and on coloring matters?

4. (a) Describe the element silver, giving its condition in nature and valence. (b) Give name and formula of the silver salt most commonly used in medicine, also test for same. (c) Give treatment of poisoning by this salt.

5. Mercury: (a) Occurrence in nature and valence. (b) Mention and give formula of three mercurous and three mercuric salts. (c) State which of these is contained in the following: "Black wash" and antiseptic tablets.

6. Show by formulae the action of sulphuric acid and of hydrochloric acid on zinc.

7. How can sugar be distinguished from other reducing substances when found in urine?

8. Of what substances are urinary calculi usually composed?

9. (a) What is an aldehyde, and what relation do they bear to alcohols? (b) Write the formula of formaldehyde and give its properties. (c) What are its advantages and disadvantages as a disinfectant?

10. Give outline of a urinary analysis, mentioning the object and general operation of the tests. (Or) Give an outline of an analysis of feces, mentioning the object and general operation of each test.

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Medical Items.

An oil painting of the late Dr. J. Brown Baxley, painted by L. P. Deitrich, will be hung in the Baltimore General Dispensary, Paca and Fayette streets.

Dr. Winford H. Smith, superintendent of the Johns Hopkins Hospital, has been spending his vacation in Maine. Dr. Karl H. Van Norman, first assistant superintendent, acted as superintendent during his absence.

BIRTHS.

To Howard J. Maldeis, M.D., University of Maryland, '03, and Mrs. Maldeis of Baltimore, Md., Wednesday, July 28, 1915, a daughter.

To Amzi Bedell Shoemaker, M.D., University of Maryland, '08, and Mrs. Shoemaker of North Attleboro, Mass., July 24, 1915, a son—Henry Wheaton.

To Don Preston Peters, M.D., and Mrs. Peters of Baltimore, Md., July 19, 1915, a son—Don Preston Peters, Jr.

MARRIAGES.

William T. Black, M.D., Physicians and Surgeons, '14, of Berkeley, W. Va., to Miss Grace Royston of Baltimore, Md., at Baltimore, June 24, 1915. Dr. and Mrs. Black will reside in Berkeley, where Dr. Black is in practice.

Howard N. Freeman, M.D., Baltimore Medical College, '12, of Baltimore, Md., to Miss Letitia E. Lord, University Hospital Training School for Nurses, class of '14, of Martinsburg, W. Va., at Martinsburg, June 17, 1915. Dr. and Mrs. Freeman will be "at home" to their friends after the 10th of July at 1532 Linden avenue, Baltimore.

DEATHS.

David Streett, M.D., College of Physicians and Surgeons, '78; a Fellow of the American Medical Association; president of the Medical and Surgical Society of Baltimore and the Baltimore Medical Society and vice-president of the Medical and Chirurgical Faculty of Maryland; professor of principles and practice of medicine in the University of Maryland and dean of the Baltimore Medical College for 25 years, until its merger; formerly a trustee of the Maryland General Hospital; died in St. Agnes Hospital, Baltimore, July 30, 1915, after an operation for intestinal trouble, aged 60 years.

Frederick Duvall Caruthers, M.D., University of Maryland, '92; formerly a Fellow of the American Medical Association; formerly professor of genito-urinary surgery in the Maryland Medical College; visiting surgeon to the Franklin Square Hospital, Baltimore; at one time assistant physician to the Spring Grove State Hospital; resident physician at Bayview Asylum and coroner of the Northeastern district of Baltimore; died at his home, July 27, 1915, from disease of the stomach, aged 44 years.

Joseph Henry Shook, M.D., Baltimore University, '98; of Bangor, Pa., for five years surgeon of the Delaware, Lackawanna & Western Railroad at Nicholson, Pa., suffered a concussion of the brain in a collision between his automobile and a trolley car at East Bangor, July 12, 1915, and died four days later, aged 44 years.

Frederick A. Conradi, M.D., Baltimore University School of Medicine, '92, formerly a member of the American Medical Association; a member of the Medical Society of the Faculty of Maryland; for more than 20 years pastor of the first German Evangelical Lutheran Church, Baltimore, died in Mercy Hospital, Baltimore, July 17, 1915, from carcinoma of the stomach, aged 68 years.

William Allison Slaugenhaupt, M.D., College of Physicians and Surgeons, '55; of Kane, Pa., died in the Summit Hospital, Kane, July 21, 1915, aged 57 years.

Everett Alanson Sherrell, M.D., University of Maryland, '12; of Statesville, N. C., died recently at his home of tuberculosis contracted at Bellevue Hospital, New York.

Lewis H. Adler, Sr., M.D., University of Maryland, '59; Jefferson Medical College of Philadelphia, '71; a native of Maryland, died of uremia at the Methodist Hospital, Philadelphia, July 15, 1915, aged 74 years.

Albert J. Laciar, M.D., College of Physicians and Surgeons, '89, for nearly 30 years a physician of Northeast Baltimore, died at his home, 1735 Linden avenue, from pneumonia, July 23, 1915, aged 52 years.

Delano Stapleton Fitzgerald, M.D., Universite de France, '80, of Baltimore, Md., died at the home of his son at Esperanza, Green Spring Valley, Md., after a lingering illness, August 7, 1915, aged 62 years.

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CARCINOMA OF THE BLADDER.—ABSTRACT OF CLINICAL LECTURE GIVEN IN THE LONG ISLAND COLLEGE HOSPITAL.

By Henry H. Morton, M.D.,

Clinical Professor of Genito-Urinary Diseases in the Long Island College Hospital; Genito-Urinary Surgeon to Long Island College and Kings County Hospitals, and the Polhemus Memorial Clinic, etc., Brooklyn, N. Y.

Every bladder tumor in time becomes malignant and kills the patient by constantly recurring and continuing hemorrhage or an ascending pyelo-nephritis.

There are no symptoms of bladder cancer till bleeding begins, at first a painless intermittent hematuria, which later becomes more or less constant.

The diagnosis can be made only by cystoscopic examination.

The earliest attempts at operation for bladder tumors consisted in simply twisting or scraping off the new growth, but recurrences were frequent. Later they were removed by the actual cautery to destroy the base. The results were a little better, but recurrences were the rule.

All operative attempts in cancer of the bladder have been discouraging, as very often the disease was spread or the suprapubic wound failed to close.

According to the European clinicians, the bladder should be opened only in

1. Neoplasms involving the dome or front.

2. Budding neoplasms, whose offshoot clog the neck of the bladder like a stopper in a bottle and cause retention of urine.

3. Neoplasms causing hematuria where hemorrhage makes intervention necessary.

When the tumor involves the floor or is around the ureteral orifice it is better to leave it alone.

In the final stages, to make the patient a little more comfortable, a suprapubic cystostomy with permanent fistula or a double nephrostomy may be done.

Fulguration with the Oudin current is the ideal treatment for non-malignant growths, but its use in malignant growths only serves to check hemorrhage or slightly retard the growth of the tumor.

At present the action of radium is too uncertain and not sufficiently worked out to be depended upon.

Removal of the tumor and resection of the bladder wall for one inch around the base promises to be of some benefit in bladder cancer, provided it is done early.

The general practitioner should bear in mind that every case of hematuria demands an immediate cystoscopic examination, and if the hematuria is caused by bladder cancer an early diagnosis with prompt removal affords at least a possibility of saving the patient's life.

H. V. Raycroft, M.D.

A Simple Mathematical Problem with a Moral

9,460	miles
18,037	"
9,476	"
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9,994	"
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7,236	"
9,644	"
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PRELIMINARY REPORT CONCERNING THE PASSAGE OF BACTERIA THROUGH THE TONSILAR TISSUE AS DETERMINED BY EXPERIMENTAL RESEARCH.

Dr. George B. Wood, Philadelphia.

Paper read at the Thirty-fifth Annual Congress of American Laryngological Association, held May 5, 6 and 7, 1913, in Washington, D. C.

From a study of our experiments it seems that the following conclusions may be drawn: 1. The tonsils in the hog are more readily infected by the anthrax bacillus than any other portion of the buccal or phargygeal mucosa. The clinical history of this disease in the hog shows that in the great majority of idiopathic cases the pharynx has been the site of invasion, and in all of these cases of pharyngeal diseases the tonsils are the port of entry. In none of my experiments was there any involvement of the pharyngeal or buccal mucosa other than the tonsils. While the culture of anthrax was generally brought into more intimate contact with one of the tonsils, it was impossible to limit the bacilli to the tonsilar surface, and they came into contact with a large part of the pharynx. In the infection an effort was made to rub the emulsion into one tonsil only, and in one case the lesions were limited to one tonsil only, but this was not the tonsil on which the culture had been rubbed. 2. Anthrax bacilli penetrate through the cryptical, and not the surface of the epithelium. 3. The anthrax bacillus probably gains access to the parenchyma of the tonsil by passing through the living, unaltered epithelium, and having gained access through the superficial layers of the epithelium, they tended to multiply in the deeper layers, and then pass into the interfollicular tissue. 4. The anthrax baccilli penetrating through the living normal epithelium cause a devitalization of the tissue, which paves the way for secondary infection from the staphylocci or other pathogenic organisms. 5. The rapidity of the invasion is influenced both by virulence of the organism and the susceptibility of the individual animal. Following the invasion the subsequent course of the disease is similar to that found in other tissues. The toxin elaborated by the bacilli causes at first an accumulation of polymorphonuclear cells, later necrosis of the tissue cells with disintegration of the nuclei. The germinating follicles show more resistance to the disease than the inter-follicular tissue. Associated with the necrotic process is an increase in the number and engorgement of the capillaries, and sometimes there is marked extravasation of the red blood cells. The anthrax bacilli accumulate in the lymph spaces, and also around the blood vessel walls. In some of the sections examined the bacilli were found penetrating the blood vessel walls, and a few were found actually in the blood current.

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Radium Solution for Intravenous Use (Ampulles). "Standard"	50 Micrograms	50 Microcuries (135,000 Mache Units)
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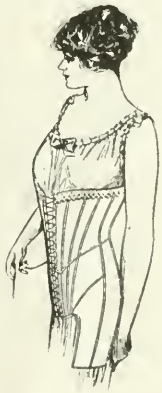

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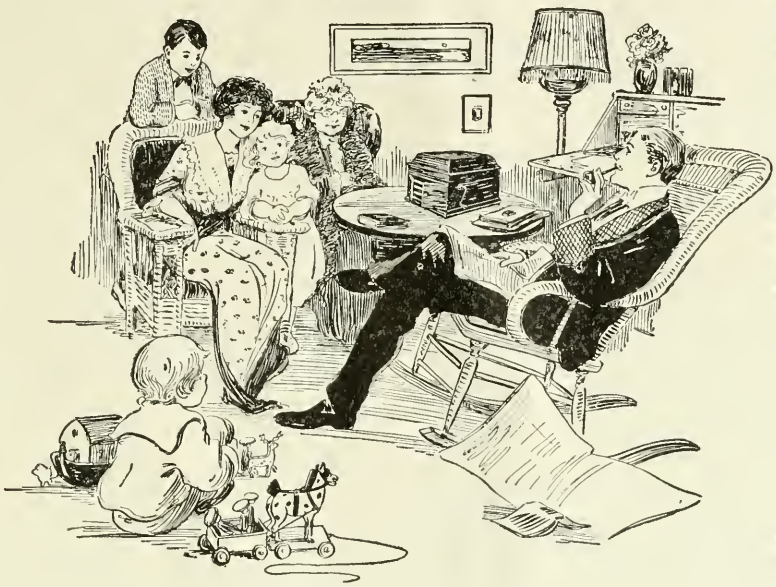

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The most recent fraud practiced in regard to this product is an attempt to profit by the renown of the firm of Sander & Sons. In order to foist upon the unwary a crude oil, that had proved injurious upon application, the firm name of Sander & Sons is illicitly appropriated, the make-up of their goods imitated, and finally the medical reports commenting on the merits of their excellent preparation are made use of to give the desired luster to the intended deceit.

This fraud, which was exposed at an action tried before the Supreme Court of Victoria at Melbourne, and others reported before in the medical literature, show that every physician should see that his patient gets exactly what he prescribed. No "just as good" allowed.

The Hay Fever Problem.

THIS is the time of year when the services of the physician are actively demanded by the victim of vasmotor rhinitis—a season dreaded not alone by the patient, but, not uncommonly, by his medical adviser as well. Particularly is this true of the latter if he has not kept abreast of modern ideas on the therapy of hay fever. In any event the disease is one that tries the patience and calls for the application of remedial agents that have been proved beyond peradventure. Happily, there are a number of such agents from which the physician can choose—products that have passed the experimental stage and demonstrated their serviceability. We refer in this connection to some members of the Adrenalin family—Adrenalin Chloride Solution, Adrenalin Inhalant, Anesthone Cream, Anesthone Inhalant. These products, in all of which the isolated active principle of the suprarenal gland (Adrenalin) is an active constituent, have rendered long, efficient service in the treatment of hay fever, and one feels no hesitancy in heartily commending them.

Adrenalin Chloride Solution, which is perhaps more widely used than any other preparation in the treatment of hay fever, is sprayed into the nasal chambers and pharynx by means of a hand atomizer adapted for aqueous liquids, or it may be applied on a pledget of cotton.

For the former purpose it is advisable to dilute the solution as marketed (1:1000) by the addition of four to five times its volume of physiologic salt solution.

Adrenalin Inhalant, which is a solution, in an aromatized neutral oil base, of the suprarenal active principle, is well adapted for vaporization and inhalation from an oil atomizer. Used as an adjunct to Adrenalin Chloride Solution, or, independently, it gives good results, parts not accessible to other medication being readily reached by the medicated vapor. It should be diluted by the addition of three to four times its volume of olive oil.

Anesthone Cream was devised by Dr. J. E. Alberts of The Hague, Holland. It contains Adrenalin and a harmless local anesthetic (para-amido-ethyl-benzoate), incorporated in a neutral ointment base, and is applied to the inside of the nostrils four or more times a day, the patient snuffing it well up after each application, the quantity required being in size about that of an ordinary pea. It affords a relief which continues for hours in many cases, a fact worth remembering when one considers the fleeting effect of most local anesthetics.

Anesthone Inhalant contains the same active ingredients as Anesthone Cream, but the proportion of Adrenalin is doubled (1:10,000). These ingredients are incorporated in an aromatized neutral oil base. It is sprayed into the nose, first being diluted with olive oil or liquid petrolatum.

Another agent which has been used with marked success in the treatment of hay fever is Mixed Infection Phylacogen. It is administered by hypodermic or intravenous injection. The initial dose should be small, a 2-Cc. dose subcutaneously or a ½-Cc. dose intravenously being suggested. Many physicians are of the opinion that the use of Mixed Infection Phylacogen marks a distinct advance in hay-fever therapy.

The Therapeutics of Epilepsy.

A CONSIDERABLE number of practitioners have been gratified with the results secured in epilepsy through the continued administration of Pasadyne (Daniel). As is well known, Pasadyne (Daniel) is a special preparation of the concentrated tincture of passiflora incarnata. Aside from its therapeutic advantages, Pasadyne (Daniel) deserves recognition in epilepsy on account of its freedom from depressing influences and the production of eruptions and gastric distress.

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The fundamental principles of the Collins System are Diaphragmatic Breathing, Resistance and Relaxation Exercise.

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An important feature of the physiological exercises that distinguishes them from ordinary exercises and sports is that you are only given the work that examination proves the heart and arteries can stand.

A strengthened physique can always throw off its ailments, and offers greater resistance to cold and disease germs.

ELECTRIC LIGHT BATHS are of great value in many conditions. When the exercises do not produce sufficient elimination—as in cases where only light exercising is advisable at the start—a few minutes in one of these cabinets will start profuse perspiration through the body's millions of pores.

These baths are far superior to the hot and steam rooms of a Turkish bath. The head being outside of the cabinet, one can breathe the fresh air, and is not obliged to inhale air laden with poisonous excretions from his own and others' bodies.

After the electric light bath, a scientific massage is given by an expert who understands the special requirements of each patron. This is followed by a salt glow which helps to invigorate and bring a healthy glow to the skin. Then the shower. It has no equal as a general awakener and invigorator.

The quarters of the Collins System on the sixth floor of the Title Building are spacious and well appointed. Mr. L. J. Young, the director, is well versed and competent and each patient receives attention and treatment suited to his individual condition and needs.

Varicose Ulcers.

EVERY practitioner of experience has come across them, those exasperating, non-healing, inflamed legs, for which legions of remedies have been recommended. When another suggestion is added the writer wishes to state that he has just treated three cases successfully by the method described here.

The first requisite is the allaying of the pain,

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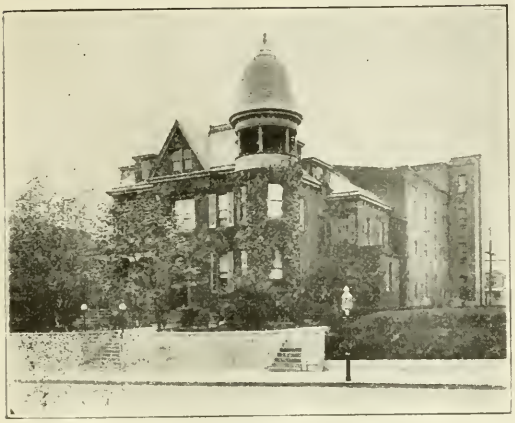

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